

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-4. (canceled)
5. (currently amended) An isolated polynucleotide or complement thereof, the polynucleotide encoding a soluble polypeptide that comprises ~~consists essentially of~~ a soluble polypeptide selected from the group consisting of a soluble, PA-binding fragment of SEQ ID NO:2, a soluble, PA-binding fragment of SEQ ID NO:6, a soluble, PA-binding fragment of SEQ ID NO:8, a soluble, PA-binding fragment of SEQ ID NO:10, and a fusion protein comprising any of the foregoing, the polynucleotide being unable to encode a polypeptide selected from the group consisting of SEQ ID NO:6, SEQ ID NO:8 and SEQ ID NO:10.
6. (currently amended) The isolated polynucleotide or complement thereof of claim [[5]] 22, wherein the soluble, PA-binding fragment of SEQ ID NO:2 begins at any amino acid in the range from 27 to 43 and ends at any amino acid in the range from 221 to 321.
- 7-10. (canceled)
11. (previously presented) A vector comprising a polynucleotide selected from the group consisting of a polynucleotide of claim 5 and a polynucleotide that hybridizes under stringent or moderately stringent hybridization conditions to a polynucleotide of claim 5.
12. (original) The vector of claim 11, further comprising a non-native expression control sequence operably linked to the polynucleotide.
13. (original) A host cell comprising a vector of claim 11.
- 14-18. (canceled)

19. (currently amended) A method for producing an anthrax toxin receptor, the method including the step of:

transcribing a polynucleotide that encodes a soluble polypeptide that ~~comprises~~ ~~consists essentially of a soluble~~ an anthrax toxin receptor operably linked to an upstream expression control sequence, the receptor being selected from the group consisting of a soluble, PA-binding fragment of SEQ ID NO:2, a soluble, PA-binding fragment of SEQ ID NO:6, a soluble, PA-binding fragment of SEQ ID NO:8, a soluble, PA-binding fragment of SEQ ID NO:10, and a fusion protein comprising any of the foregoing, to produce an mRNA; and

translating the mRNA to produce the anthrax toxin receptor.

20. (original) A method as claimed in Claim 19, wherein the polynucleotide is operably linked to the expression control sequence in an expression vector, and wherein the expression vector is delivered into a host cell, the expression control sequence being operable in the host cell.

21. (original) A method as claimed in Claim 19, wherein at least one of the transcribing and translating steps are performed in vitro.

22. (new) The isolated polynucleotide or complement thereof of claim 5, wherein the polynucleotide encodes a soluble polypeptide that comprises a soluble, PA-binding fragment of SEQ ID NO:2.

23. (new) The isolated polynucleotide or complement thereof of claim 5, wherein the polynucleotide encodes a soluble polypeptide that comprises a soluble, PA-binding fragment of SEQ ID NO:6, the polynucleotide being unable to encode SEQ ID NO:6.

24. (new) The isolated polynucleotide or complement thereof of claim 5, wherein the polynucleotide encodes a soluble polypeptide that comprises a soluble, PA-binding fragment of SEQ ID NO:8, the polynucleotide being unable to encode SEQ ID NO:8.

25. (new) The isolated polynucleotide or complement thereof of claim 5, wherein the polynucleotide encodes a soluble polypeptide that comprises a soluble, PA-binding fragment of SEQ ID NO:10, the polynucleotide being unable to encode SEQ ID NO:10.

26. (new) A method as claimed in Claim 19, wherein the anthrax toxin receptor is a soluble, PA-binding fragment of SEQ ID NO:2 that begins at any amino acid in the range from 27 to 43 and ends at any amino acid in the range from 221 to 321.